

## CLAIMS

What is claimed is:

1. A method for clarifying and compressing an ATM connection type information for an ATM connection setup in accordance with an ATM signaling protocol in an ATM call control module being located between an ATM terminal and an ATM switching system, said ATM call control module performing an ATM connection setup function, said method comprising:

a first step of receiving an ATM SETUP message, said ATM SETUP message requesting said ATM connection setup from said ATM calling terminal;

a second step of analyzing information elements included in said received SETUP message to determine ATM connection types to be setup, thereby clarifying connection type information; and

a third step of compressing said clarified connection type information into one connection type information,

wherein said ATM call control module includes a predetermined combinations of said ATM connections which can be updated.

2. The method according to claim 1 further comprising:

a fourth step of rejecting connection setup request to transmit a reject message to said ATM calling terminal and completing a ATM connection setup procedure, when said determined ATM connection type is not matched to said predetermined combinations of said ATM connections, and

wherein said fourth step is disposed after said second step.

3. The method according to claim 1, wherein said connection type information includes:

ATM connection protocol information (dss2, uni3.1, uni4.0, bisup, bici, and pnni) that are clarified through Protocol Discriminator and interface information among said information elements;

ATM connection configuration information (vc, vp, dbr, sbr, abr, ubr, ptp, and ptmp) that is clarified through Broadband Bearer Capability among said information elements;

ATM signal transmission information (en bloc and overlap) which are clarified though Broadband Sending Complete among said information elements;

ATM traffic negotiation information (traffic\_nego) which are clarified though Minimum Acceptable ATM Traffic Descriptor among said information elements;

ATM service type information (nisdn) which are clarified though Narrowband Bearer Capability among said information elements;

ATM virtual connection information (soft\_pvc) which are clarified though Soft PVC called Endpoint among said information elements; and

ATM service type information (ip) which are clarified though Generic Identifier Transport among said information elements.

4. The method according to claim 3, wherein said third step includes a step of recording all of said clarified ATM connection type information to one variable (ATM\_connection\_type\_list) of POWERSET mode which is defined with CHIL language, as follows:

SYNMODE powerset\_mode= POWERSET(ATM\_connection\_type\_list).

5. The method according to claim 4, further comprising: a step of adding connection type information (traffic\_modify) which represents traffic modification function to said one variable, when MODIFY REQUEST message which intends to modify connection type is received after said ATM connection is setup.

6. The method according to claim 5, wherein a IAM message instead of said SETUP message is used when said ATM signaling protocol is ITU-T B-ISUP or ATM Forum B-ICI.

7. A media readable with a computer, in which a program is recorded, said program performing procedures for clarifying and compressing an ATM connection type information for an ATM connection setup in accordance with an ATM signaling protocol in an ATM call control module being located between an ATM terminal and an ATM switching system, said ATM call control module performing an ATM connection setup function, wherein said procedures comprising:

a first procedure of receiving an ATM SETUP message, said ATM SETUP message requesting said ATM connection setup from said ATM calling terminal;

a second procedure of analyzing information elements included in said received SETUP message to determine said ATM signaling protocol and an ATM connection type to be setup, thereby clarifying said connection type information; and

a third procedure of compressing said clarified connection type information into one connection type information.